

accordance with signals from the signal conditioner and/or the display. Claim 30 of the present application recites a controller being operatively coupled to the processor wherein the controller is configured to selectively control the press machine. Claim 36 of the present application recites a press machine controller operatively coupled to the press machine vibration and measurement device. Furthermore, claim 40 of the present application recites selectively controlling press machine operation in accordance with the vibration activity measurement. None of the references or combination of the references teach or suggest the ability to control the press based on the data received from the vibration severity monitor. The '811 reference is used to utilize and collect data regarding the vibration of a machine. The '843 reference is used to diagnose the presence of any abnormality with a press that would deteriorate the quality of the product manufactured by the press. The '757 reference is a vibration monitoring system for a machine. None of the references alone or in combination provide the ability to control the press based on the data from monitoring the press as in the present invention. Since none of the reference alone or in combination can allow for the control of the press based on the data from monitoring the press as in the present invention, claims 1, 19, 30, 36, and 40 are not obvious over the references alone or in combination.

Claims 1, 19, 30, 36, and 40 are allowable independent claims and claims 2-7, 11-18, 23-28, 31-35, 37-39 and 41-43 are either directly or indirectly dependent on independent claims 1, 19, 30, 36 or 40, therefore, the dependent claims are patentably distinguishable over the references alone or in combination for at least the same reason.

Applicant respectfully request the Examiner to withdraw the 103 rejection to the claims.

5 The Examiner has rejected claim 8 under 35 U.S.C. § 103(a) as being unpatentable over the '811 reference in view of '843 reference and the '757 reference and further in view of the Ronemus (3,859,847) reference. Claim 1 is allowable independent claim and claim 8 is directly dependent on claim 1, therefore, dependent claim 8 is patentably distinguishable over the references alone or in combination for at least the same reason. Applicant respectfully requests the Examiner to withdraw the 103 rejection to claim 8.

10 The Examiner has rejected claims 9, 10, 20-22 and 29 under the 35 U.S.C. § 103(a) as being unpatentable over the '811 reference in view of the '843 reference and '757 reference and further in view of the Bevill, Jr. (5,802,151) reference. There is no teaching, suggestion, or incentive to combine the '151 reference with the '757 reference, the '811 reference, or the '843 reference. The '151 reference relates to a telephone interface protection circuit and modem wherein the circuit checks for an active telephone line and checks for over-current conditions caused when a modem designed for a public switched telephone network is plugged into a private digital telephone network. The '811 reference is a handheld data collector and analyzer system for use in monitoring a machine. The '811 reference does not describe a problem that would be solved by a telephone interface protection circuit and modem wherein the circuit checks for an active telephone line and checks the line for over-current conditions caused when a modem design for the public switched telephone network is plugged in to a public digital telephone network. Also, the '151 reference does not describe having a problem that would be solved by a handheld data collector and

analyzer used to monitor the vibration of a machine. Since the '151 reference does not describe a problem that would be solved by the '811 reference and the '811 reference does not describe a problem that would be solved by the '151 reference there is not teaching, suggestion, or incentive to combine the '151 reference with the '811 reference.

As described earlier, the '151 reference relates to a telephone interface protection circuit and modem wherein the circuit checks for an active telephone line and checks the line for over-current conditions caused when a modem designed for the public switched telephone network is plugged into a private digital telephone network. The '843 reference relates to a method of diagnosing a press for the presence of any abnormality that deteriorates the quality of the product manufactured by the press. The '151 reference does not describe a problem that would not be solved by a method of diagnosing a press for the presence of any abnormality that determinates the quality manufactured by the press and the '843 reference does not describe a problem that would be solved by a telephone interface protection circuit and modem wherein the circuit checks for an active telephone line and checks the line for over-current conditions caused when a modem designed for a public switched telephone network is plugged into a private digital telephone network. Since the '151 reference does not describe a problem that would be solved by the '843 reference and the '843 reference does not describe a problem that would be solved by the '151 reference, there is no teaching, suggestion, or incentive to combine the '151 with the '843 reference.

As described earlier, the '151 reference relates to a telephone interface protection circuit and modem wherein the circuit checks for an active telephone line and checks the line for over-current

conditions caused when a modem that is designed for a public switched telephone network is plugged into a private digital telephone network. The '757 reference is a monitoring system to monitor the vibration for a machine. The '151 reference does not describe a problem that would be solved by a monitoring system that monitors the vibration of a machine and the '757 reference does not describe a problem that would be solved by a telephone interface protection circuit and modem wherein the circuit checks for an active telephone line and checks the line for over-current conditions caused when a modem designed for a public switched telephone network is plugged into a private digital telephone network. Since the '151 reference does not describe a problem that would be solved by the '757 reference and the '757 reference does not describe a problem that would be solved by the '151 reference, there is no teaching, suggestion, or incentive to combine the '151 with the '757 reference.

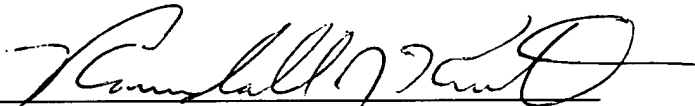
Claim 29 of the present application recites generating a unique press vibration severity/reliability zone chart wherein the vibration severity of the press is monitored and the monitored vibration severity and corresponding vibrations severity/reliability zone are outputted. For argument sake, even if the combination of references as described by the Examiner were proper, none of the references alone or in combination make obvious generating a unique press vibration severity/reliability zone chart wherein the vibration severity of the press is monitored and the monitored vibration severity and the corresponding vibration severity/reliability zone are outputted. Furthermore, none of the references alone or in combination describe outputting the monitored vibration severity and the corresponding vibration severity/reliability zone. Since none of the references in

combination or alone make claim 29 obvious, claim 29 is an allowable independent claim. Also, claims 9, 10, and 20-22 are either directly or indirectly dependent on allowable independent claim 1 or 19, therefore, the dependent claims are patently distinguishable over the references alone or in combination for at least the same reason. Applicant respectfully requests the Examiner to withdraw the 103 rejection to the claims.

Applicant respectfully requests the Examiner to withdraw the 103 rejection to the claims and forward an Notice of Allowability to the undersigned. If the Examiner has any questions that would speed prosecution of the case, the Examiner is invited to call the undersigned at (260) 485-6001.

If the Examiner has any questions or comments that would speed prosecution of this case, the Examiner is invited to call the undersigned at 260/485-6001.

Respectfully submitted,


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RJK/ste8

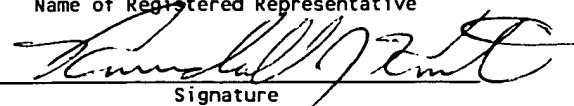
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MARKED-UP CLAIMS

Please add new Claims 30 as follows:

30. A system in combination with a press machine and a press machine sensor assembly, said system comprising:

a press machine vibration monitoring apparatus, said press vibration monitoring apparatus being operatively coupled to said
5 press machine sensor assembly, said press machine vibration monitoring apparatus comprising:

a processor to process sensor signals generated by said press machine sensor assembly; and

a controller being operatively coupled to said processor,
10 said controller being configured to selectably control said press machine.

31. The system as recited in Claim 30, wherein said controller being configured further to control said press machine in accordance with processed sensor signals received from said processor.

32. The system as recited in Claim 30, wherein said processor being configured to generate relative to said press machine at least one of an acceleration measurement, a velocity measurement, and a displacement measurement.

5 Please amend 33 as follows:

33. The system as recited in Claim 30, wherein said press machine sensor assembly includes at least one accelerometer.



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MARKED-UP CLAIMS

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34. The system as recited in Claim 30, further includes a display operatively coupled to said processor.

Please amend 35-37 as follows:

35. The system as recited in Claim 30, wherein said press machine vibration monitoring apparatus defining a built-in element of said press machine.

36. An apparatus in combination with a press machine and a press machine sensor assembly, said apparatus comprising:

a press machine vibration measurement device operatively coupled to said press machine sensor assembly; and

5 a press machine controller operatively coupled to said press machine vibration measurement device.

37. The apparatus as recited in Claim 36, wherein said press machine vibration measurement device further comprises a press acceleration determination unit, a press velocity determination unit, and/or a press displacement determination unit.

38. The apparatus as recited in Claim 36, further comprises:
a display operatively coupled to said press machine vibration measurement device and/or said press machine controller.

39. The apparatus as recited in Claim 36, wherein said apparatus having a built-in configuration relative to said press machine.



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MARKED-UP CLAIMS

40. A method in combination with a press machine, said method comprising the steps of:

sensing and measuring vibration activity in said press machine; and

5 selectably controlling press machine operation in accordance with the vibration activity measurement.

41. The method as recited in Claim 40, further comprises the step of:

providing a built-in press machine vibration monitoring device configured to perform the vibration activity measurement
5 and/or the press machine operation control.

42. The method as recited in Claim 40, further comprises the step of:

displaying the vibration activity measurement and/or a representation thereof.

43. The method as recited in Claim 40, further comprises the step of:

performing at least one of an alarm notification task, a vibration-related data storage task, a diagnostic task, and/or a
5 remote vibration-related data communication task, using the vibration activity measurement.

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